

Mandarin group (Satsumas, King, Mandarin), means that the skin of the fruit is not extremely puffy or extremely loose.

§ 51.1168 Slightly misshapen.

Slightly misshapen means that the fruit is not of the shape characteristic of the variety but is not appreciably elongated or pointed or otherwise deformed.

§ 51.1169 Slightly rough texture.

Slightly rough texture means that the skin is not of smooth texture but is not materially ridged, grooved, or wrinkled.

§ 51.1170 Serious damage.

Serious damage means any specific defect described in § 51.1175, Table I; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which seriously detracts from the appearance, or the edible or marketing quality of the fruit.

§ 51.1171 Misshapen.

Misshapen means that the fruit is decidedly elongated, pointed or flatsided.

§ 51.1172 Slightly spongy.

Slightly spongy means that the fruit is puffy or slightly wilted but not flabby.

§ 51.1173 Very serious damage.

Very serious damage means any specific defect described in § 51.1175, Table I; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which very seriously detracts from the appearance, or the edible or marketing quality of the fruit.

§ 51.1174 Diameter.

Diameter means the greatest dimension measured at right angles to a line from stem to blossom end.

§ 51.1175 Classification of defects.

TABLE I

Factor	Injury	Damage	Serious damage	Very serious damage
Ammoniation	Not occurring as light speck type.	Scars are cracked or dark and aggregating more than a circle $\frac{3}{4}$ inch (19.1 mm) in diameter.	Aggregating more than 25 percent of the surface.
Bruises	Segment walls are collapsed, or rag is ruptured and juice sacs are ruptured.	Segment walls are collapsed, or rag is ruptured and juice sacs are ruptured.	Segment walls are collapsed, or rag is ruptured and juice sacs are ruptured.	Fruit is split open, peel is badly watersoaked, or rag is ruptured and juice sacs are ruptured causing a mushy condition affecting all segments more than $\frac{3}{4}$ inch (19.9 mm) at bruised area or the equivalent of this amount, by volume, when affecting more than one area on the fruit.
Buckskin	Aggregating more than a circle 1 inch (25.4 mm) in diameter.	Aggregating more than 25 percent of the surface.	Aggregating more than 50 percent of the surface.
Caked melanose	Aggregating more than a circle $\frac{5}{8}$ inch (15.9 mm) in diameter.	Aggregating more than a circle $\frac{3}{4}$ inch (19.1 mm) in diameter.	Aggregating more than 25 percent of the surface.
Creasing	Materially weakens the skin, or extends over more than one-third of the surface.	Seriously weakens the skin, or extends over more than one-half of the surface.	Very seriously weakens the skin, or is distributed over practically the entire surface.

TABLE I—Continued

Factor	Injury	Damage	Serious damage	Very serious damage
Dryness or mushy condition.	.....	Affecting all segments more than $\frac{1}{4}$ inch (6.4 mm) at stem end, or the equivalent of this amount, by volume, when occurring in other portions of the fruit.	Affecting all segments more than $\frac{1}{2}$ inch (12.7 mm) at stem end, or the equivalent of this amount, by volume, when occurring in other portions of the fruit.	Affecting all segments more than $\frac{3}{4}$ inch (19.1 mm) at stem end, or the equivalent of this amount, by volume, when occurring in other portions of the fruit.
Green spots	Aggregating more than a circle $\frac{3}{8}$ inch (9.5 mm) in diameter, caused by scale.	Aggregating more than a circle $\frac{5}{8}$ inch (15.9 mm) in diameter, caused by scale.	Aggregating more than a circle $\frac{7}{8}$ inch (22.2 mm) in diameter, caused by scale.	Aggregating more than $\frac{1}{3}$ of the surface, caused by scale.
Oil spots	Aggregating more than a circle $\frac{3}{8}$ inch (9.5 mm) in diameter.	Aggregating more than a circle $\frac{7}{8}$ inch (22.2 mm) in diameter.	Aggregating more than a circle $1\frac{1}{4}$ inches (31.8 mm) in diameter.	Aggregating more than $\frac{1}{3}$ of the surface.
Scab .....	.....	Materially detracts from the shape or texture, or aggregating more than a circle $\frac{5}{8}$ inch (15.9 mm) in diameter.	Seriously detracts from the shape or texture, or aggregating more than a circle $\frac{3}{4}$ inch (19.1 mm) in diameter.	Aggregating more than 25 percent of the surface.
Scale	More than a few adjacent to the "button" at the stem end, or more than 6 scattered on other portions of the fruit.	Aggregating more than a circle $\frac{5}{8}$ inch (15.9 mm) in diameter.	Aggregating more than a circle $\frac{3}{4}$ inch (19.1 mm) in diameter.	Aggregating more than 25 percent of the surface.
Scars, Hail, or Thorn scratches [For smooth or fairly smooth superficial scars see § 51.1161.].	Depressed, not smooth, or detracts from appearance more than the amount of discoloration permitted in the grade.	Deep or rough aggregating more than a circle $\frac{1}{4}$ inch (6.4 mm) in diameter; slightly rough with slight depth aggregating more than a circle $\frac{7}{8}$ inch (22.2 mm) in diameter; smooth or fairly smooth with slight depth aggregating more than a circle $1\frac{1}{4}$ inches (31.8 mm) in diameter.	Deep or rough aggregating more than a circle $\frac{1}{2}$ inch (12.7 mm) in diameter; slightly rough with depth aggregating more than a circle $1\frac{1}{4}$ inches (31.8 mm) in diameter; smooth or fairly smooth with slight depth aggregating more than 10 percent of fruit surface.	Deep or rough or unsightly that appearance is very seriously affected.
Skin breakdown	Aggregating more than a circle $\frac{1}{4}$ inch (6.4 mm) in diameter.	Aggregating more than a circle $\frac{1}{2}$ inch (12.7 mm) in diameter.	Aggregating more than a circle $\frac{7}{8}$ inch (22.2 mm) in diameter.	Aggregating more than 25 percent of the surface.
Sprayburn .....	.....	Aggregating more than a circle $\frac{5}{8}$ inch (15.9 mm) in diameter.	Hard and aggregating more than a circle $1\frac{1}{2}$ inches (38.1 mm) in diameter.	Aggregating more than 25 percent of the surface.
Split, rough, protruding navels.	Split is unhealed, or more than $\frac{1}{8}$ inch (3.2 mm) in length, or navel protrudes beyond the general contour, and opening is so wide, folded and ridged that it detracts from the appearance.	Split is unhealed, or more than $\frac{1}{4}$ inch (6.4 mm) in length, or more than three well healed splits, or navel protrudes beyond the general contour, and opening is so wide, folded and ridged that it detracts from appearance.	Split is unhealed, or more than $\frac{1}{2}$ inch (12.7 mm) in length, or two or more splits aggregate more than 1 inch (25.4 mm) in length, or navel protrudes beyond general contour, and opening is so wide, folded and ridged that it detracts from appearance.	Split is unhealed or fruit is seriously weakened.
Sunburn .....	.....	Skin is flattened, dry, darkened, or hard and the affected area exceeds 25 percent of the surface.	Skin is hard and affects more than one-third of the surface.	Aggregating more than 50 percent of the surface.

Note: All references to area or aggregating area, or length in this standard are based on an orange or tangelo $2\frac{7}{8}$ inches (73.0 mm) in diameter, allowing proportionately greater areas on larger fruit and lesser areas on smaller fruit.

§ 51.1176

7 CFR Ch. (1–1–97 Edition)

STANDARDS FOR INTERNAL QUALITY OF
COMMON SWEET ORANGES (CITRUS
SINENSIS (L) OSBECK)

§ 51.1176 U.S. Grade AA Juice (Double A).

Any lot of oranges, the juice content of which meets the following requirements, may be designated “U.S. Grade AA Juice (Double A)”:

(a) Each lot of fruit shall contain an average of not less than 5 gallons (18.9 liters) of juice per standard packed box of 1½ bushels.

(b) The average juice content for any lot of fruit shall have not less than 10 percent total soluble solids, and not less than one-half of 1 percent anhydrous citric acid, or more than the permissible maximum acid specified in Table II of § 51.1178.

§ 51.1177 U.S. Grade A Juice.

Any lot of oranges, the juice content of which meets the following requirements, may be designated “U.S. Grade A Juice”:

(a) Each lot of fruit shall contain an average of not less than 4½ gallons (17.0 liters) of juice per standard packed box of 1½ bushels.

(b) The average juice content for any lot of fruit shall have not less than 9 percent total soluble solids, and not less than one-half of 1 percent anhydrous citric acid, or more than the permissible maximum acid specified in Table II of § 51.1178.

§ 51.1178 Maximum anhydrous citric acid permissible for corresponding total soluble solids.

For determining the grade of juice, the maximum permissible anhydrous citric acid content in relation to corresponding total soluble solids in the fruit is set forth in the following Table II together with the minimum ratio of total soluble solids to anhydrous citric acid:

TABLE II

Total soluble solids (average pct)	Maximum anhydrous citric acid (average pct)	Minimum ratio of total soluble solids to anhy- drous citric acid
9.0	0.947	9.50–1
9.1 .....	.963	9.45–1

TABLE II—Continued

Total soluble solids (average pct)	Maximum anhydrous citric acid (average pct)	Minimum ratio of total soluble solids to anhy- drous citric acid
9.2 .....	.979	9.40–1
9.3 .....	.995	9.35–1
9.4	1.011	9.30–1
9.5	1.027	9.25–1
9.6	1.043	9.20–1
9.7	1.060	9.15–1
9.8	1.077	9.10–1
9.9	1.094	9.05–1
10.0	1.111	9.00–1
10.1	1.128	8.95–1
10.2	1.146	8.90–1
10.3	1.164	8.85–1
10.4	1.182	8.80–1
10.5	1.200	8.75–1
10.6	1.218	8.70–1
10.7	1.237	8.65–1
10.8	1.256	8.60–1
10.9	1.275	8.55–1
11.0	1.294	8.50–1
11.1	1.306	8.50–1
11.2	1.318	8.50–1
11.3	1.329	8.50–1
11.4	1.341	8.50–1
11.5	1.353	8.50–1
11.6	1.365	8.50–1
11.7	1.376	8.50–1
11.8	1.388	8.50–1
11.9	1.400	8.50–1
12.0	1.412	8.50–1
12.1	1.424	8.50–1
12.2	1.435	8.50–1
12.3	1.447	8.50–1
12.4	1.459	8.50–1
12.5	1.471	8.50–1
12.6	1.482	8.50–1
12.7	1.494	8.50–1
12.8	1.506	8.50–1
12.9	1.517	8.50–1
13.0	1.530	8.50–1
13.1	1.541	8.50–1
13.2	1.553	8.50–1
13.3	1.565	8.50–1
13.4	1.576	8.50–1
13.5	1.588	8.50–1
13.6	1.600	8.50–1
13.7	1.612	8.50–1
13.8	1.624	8.50–1
13.9	1.635	8.50–1
14.0	1.647	8.50–1
14.1	1.659	8.50–1
14.2	1.671	8.50–1
14.3	1.682	8.50–1
14.4	1.694	8.50–1
14.5	1.705	8.50–1
14.6	1.718	8.50–1
14.7	1.729	8.50–1
14.8	1.741	8.50–1
14.9	1.753	8.50–1
15.0	1.765	8.50–1
15.1	1.776	8.50–1
15.2	1.788	8.50–1
15.3	1.800	8.50–1
15.4	1.812	8.50–1
15.5	1.824	8.50–1
15.6 or more		8.50–1